

## REMARKS

This amendment is responsive to the Office Action mailed November 20, 2008. Applicant has studied the Office Action and the claims, and requests reconsideration of the claims in view of the foregoing amendments and the following remarks.

### Brief Summary of the Office Action

The Office Action rejected Claims 1, 4, 12, 15, and 23 under 35 U.S.C. § 101 as allegedly being directed to nonstatutory subject matter. The Office Action also rejected Claims 1-34<sup>1</sup> under 35 U.S.C. § 103(a) as allegedly being unpatentable over Gutterman et al. (U.S. Patent No. 5,297,031) in view of Nelson (U.S. Patent No. 4,823,265).

### Brief Summary of the Amendments

Claims 1, 4, 12-15, and 23 have been amended herewith. Furthermore, new Claims 35-39 have been added. Claims 1-39 are thus pending in the application.

### Claims 1, 4, 12, 15, and 23 Are Directed to Statutory Subject Matter

Applicant respectfully submits that Claims 1, 4, 12, 15, and 23 are directed to statutory subject matter under 35 U.S.C. § 101. The Section 101 rejection of Claims 1, 4, 12, 15, and 23 should therefore be withdrawn. New Claim 35 also presents subject matter that is patentable under 35 U.S.C. § 101.

The Office Action (page 1) asserted that applicant's claims are "directed to an algorithm" and that the steps recited in the claims are "mere ideas in the abstract . . . without a practical application." The Office Action also alleged that the claims "do not produce a useful, concrete and tangible result."

Applicant strongly disagrees. The relevant statute, 35 U.S.C. § 101, states "Whoever invents or discovers any new and useful process, machine, manufacture, or composition of

---

<sup>1</sup> The Office Action (page 1) referred to "Claims 1-28" as being rejected under 35 U.S.C. § 103(a). However, the Office Action (pages 13 and 14) also addressed Claims 29-34. Accordingly, applicant is responding as if Claims 1-34 are subject to the Section 103(a) rejection.

matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title." Court precedent interpreting Section 101 does not support the claim rejection set forth in the Office Action.

With respect to process claims, the Federal Circuit Court of Appeals explained in *In re Bilski*, 545 F.3d 943 (Fed. Cir. 2008) (en banc), "[a] claimed process is surely patent-eligible under § 101 if: (1) it is tied to a particular machine or apparatus, or (2) it transforms a particular article into a different state or thing." Claims 1-11, 29, and 30, which are process claims, are, at a minimum, tied to a particular machine or apparatus, namely, "one or more computing devices of a computer system" which have "a computer communications interface."

Claims 1-11, 29, and 30 recite computer-implemented methods of facilitating trading. The method according to Claim 1 includes "automatically, via a computer, sending a trial order to a computer-implemented market via a computer communications interface" and "automatically, via a computer, receiving a pairing report via a computer communications interface." The method elements of Claim 4 are implemented "under control of instructions that are executed by one or more computing devices of a computer system," and include "receiving a trial order via a computer communications interface" and "reporting, via a computer communications interface, the pairing of the trial order for the zero quantity of the item."

Claims 1-11, 29, and 30 are tied to a particular machine or apparatus. According to *In re Bilski*, Claims 1-11, 29, and 30 are therefore directed to subject matter that is patent-eligible under Section 101.

Claims 12-22, 31, and 32 are directed to a computer system that is configured to facilitate trading. The computer system according to Claim 12 includes "a first computing component configured to generate a trial order . . . , wherein the computing component further includes a communications interface configured to send the trial order to a market" and "a second computing component configured to receive a pairing report from the market via a communications interface."

The computer system claimed in Claims 12-22, 31, and 32 constitutes a "machine" within the meaning of Section 101. Therefore, Claims 12-22, 31, and 32 are directed to patent-eligible subject matter.

Claims 23-28, 33, and 34 are directed to a tangible computer-accessible medium with structurally modified material storing computer-executable instructions, wherein the instructions facilitating trading at a market. When the instructions are accessed and executed, the instructions cause a computer to undertake actions, including "receiv[ing] a trial order that identifies an item to trade," "pair[ing] the trial order with a contra-side order," which includes "adjusting the quantity indicated in the trial order to zero," and "report[ing] the pairing of the trial order for the zero quantity of the item."

A claim to a tangible computer-accessible medium as set forth in Claim 23 has been found to be eligible for patent protection. See *In re Beauregard*, 53 F.3d 1583 (Fed. Cir. 1995). Claims 23-28, 33, and 34 are directed to an article of manufacture embodied as a computer-accessible medium with structurally modified material storing computer-executable instructions. Accordingly, Claims 23-28, 33, and 34 define patent-eligible subject matter. The rejection of Claims 23-28, 33, and 34 should be withdrawn.

In addition, new Claim 35 and its dependent Claims 36-38 are directed to a computer system. The claims are written using a means plus function claiming format. Nothing in 35 U.S.C. § 112, paragraph 6, removes the subject matter of Claims 35-38 from patent eligibility under Section 101. Accordingly, new Claims 35-38 are directed to statutory subject matter.

Applicant respectfully submits that Claims 1, 4, 12, 15, and 23, as well as new Claim 35, recite subject matter that meets the statutory requirements of Section 101. Withdrawal of the claim rejections based on Section 101 is merited.

#### Claims 1-3 Are Patentable Over Gutterman and Nelson

Claim 1, as amended, reads as follows:

1. A computer-implemented method of facilitating trading, comprising:

automatically, via a computer, sending a trial order to a computer-implemented market via a computer communications interface, wherein the trial order identifies an item to trade and indicates a non-zero quantity and price for the item, and wherein the quantity indicated in the trial order is automatically set to zero when the trial order is paired with a contra-side order, and

automatically, via a computer, receiving a pairing report via a computer communications interface when the trial order is paired with a contra-side order,

wherein the trial order is paired for a zero quantity of the item, and wherein the trial order provides discovery of current market depth for the item at the indicated quantity and price while resulting in a pairing for a zero quantity of the item.

Guttermann is directed to a method and apparatus for order management by market brokers. Orders are received and displayed for execution. In particular, the orders may be arranged and displayed in an order deck, along with a total of orders at the market price. (See the Abstract of Guttermann.) Guttermann discusses handling order acceptances, fill reports, and cancel confirmations (Col. 6, lines 53-55). "Buy orders are represented in the deck pane as blue square shapes, and sell orders are represented as red circles, both of which include indications of the quantities of the orders represented." (Col. 12, lines 21-24.) Filling orders is further described at Col. 13, lines 27-46, which discusses communicating the filled order information to a clearinghouse.

The remarks in the Office Action fail to show with any particularity which parts of Guttermann disclose each of the rejected recitations of Claim 1. Applicant has considered the entire disclosure of Guttermann, including the passages cited in the Office Action (namely, the Abstract, as well as Col. 7, line 45, to Col. 8, line 32, and Col. 5, line 59, to Col. 6, line 27). Nothing in Guttermann discloses "automatically, via a computer, sending a trial order to a computer-implemented market via a computer communications interface, wherein the trial order identifies an item to trade and indicates a non-zero quantity and a price for the item, and wherein

the quantity indicated in the trial order is automatically set to zero when the trial order is paired with a contra-side order," as claimed in Claim 1.

Guttermann also fails to teach "automatically, via a computer, receiving a pairing report via a computer communications interface when the trial order is paired with a contra-side order, wherein the trial order is paired for a zero quantity of the item, and wherein the trial order provides discovery of current market depth for the item at the indicated quantity and price while resulting in a pairing for a zero quantity of the item."

The disclosure of Guttermann is completely deficient with respect to Claim 1. All of the orders discussed in Guttermann are regular orders to buy and sell that, when executed, result in a trade for a non-zero quantity of the item. Guttermann's orders are not "trial orders . . . paired for a zero quantity of the item." Should the Examiner continue to cite Guttermann as a pertinent reference, the Examiner is required to indicate which portion of Guttermann is considered to describe "trial orders" as claimed in Claim 1. (See 37 C.F.R. § 1.104(c)(2), which states "The pertinence of each reference, if not apparent, must be clearly explained and each rejected claim specified.")

Recognizing that Guttermann is deficient in at least one aspect ("Guttermann fail to explicitly teach while resulting in a pairing for a zero quantity of the item") (Office Action, page 2), the Office Action relied on a combination of Nelson and Guttermann to reject Claim 1. Nevertheless, the disclosure of Nelson does not overcome the deficiencies of Guttermann.

Nelson is directed to an accounting and marketing system for buying and selling renewable options. Option contracts are separately tradable from their underlying securities. Options markets or exchanges designate different symbols for trading option contracts that have different strike prices and different expiration dates. Just as with orders to buy and sell shares of a stock, orders to buy and sell option contracts are paired at a market and result in a trade of a non-zero number of option contracts between buyers and sellers.

Nelson teaches nothing about a "trial order . . . resulting in a pairing for a zero quantity of the item," as claimed in Claim 1. The example shown in Nelson at Figure 5a concerns the display of *current market prices* for buying and selling different tradable instruments, namely, shares of XXX Corp. and option contracts for XXX Corp. A display of current prices does not provide information as to current market depth at a quantity and price and does not suggest a "trial order" as claimed. Indeed, such a display is indicative of regular orders to buy and sell non-zero quantities of shares and options at a market.

According to Nelson, when a trader desires to buy or sell an option contract, the trader enters a buy or sell order which is executable at the market for the option contract. In contrast, a trial order as claimed in the present application is configured to have its indicated quantity automatically set to zero when the trial order is paired with a contra-side order. Accordingly, a trial order does not result in a trade between market participants for a non-zero quantity of the item but instead produces a pairing report for a zero quantity of the item.

The disclosure of Nelson at Col. 6, lines 3-21; Col. 8, lines 53-60, and Col. 9, lines 18-28, as cited in the Office Action is simply not relevant to the claims of the present application. Nothing in Nelson even suggests a "trial order . . . resulting in a pairing for a zero quantity of the item," as claimed in Claim 1.

Whether considered alone or combined, the disclosures of Gutterman and Nelson fail to teach the elements in Claim 1. Gutterman and Nelson thus fail to support a *prima facie* obviousness rejection of Claim 1. Withdrawal of the rejection of Claim 1 is required.

Claims 2 and 3, which depend from Claim 1, are patentable for at least the same reasons as Claim 1, and for the additional subject matter they recite. In particular, applicant maintains that neither Gutterman nor Nelson teaches the following features:

- wherein the pairing report also indicates the price at which the trial order was paired with the contra-side order (Claim 2); and
- wherein the automatically sending and receiving are performed by a trading process (Claim 3).

For at least these reasons, Claims 2 and 3 should be allowed.

Claims 4-11 and 29-30 Are Patentable Over Gutterman and Nelson

Claim 4, as amended, reads as follows:

4. A computer-implemented method of facilitating trading, comprising:
- automatically, under control of instructions that are executed by one or more computing devices of a computer system:
    - receiving a trial order via a computer communications interface, wherein the trial order identifies an item to trade and indicates a non-zero quantity and a price for the item,
    - pairing the trial order with a contra-side order, wherein said pairing includes automatically adjusting the quantity indicated in the trial order to zero and producing a pairing of the trial order with the contra-side order for a zero quantity of the item, and
    - reporting, via a computer communications interface, the pairing of the trial order for the zero quantity of the item.

As noted above with respect to Claim 1, Gutterman discloses a method and system in which orders are received and displayed for execution. The orders disclosed by Gutterman result in trades for non-zero quantities of items. In contrast, a "trial order" as recited in Claim 4 is paired "with a contra-side order, wherein said pairing includes automatically adjusting the quantity indicated in the trial order to zero and producing a pairing of the trial order with the contra-side order for a zero quantity of the item."

Acknowledging that Gutterman is deficient,<sup>2</sup> the Office Action relied on Nelson at Col. 6, lines 3-21; Col. 8, lines 53-60; and Col. 9, lines 18-28, to support the rejection of Claim 4. Applicant has considered these passages of Nelson, and indeed the entire specification of Nelson, and does not find any disclosure of a trial order as claimed.

---

<sup>2</sup> The Office Action (page 4) stated "Gutterman fail to explicitly teach would have been paired had it been a regular order." The relationship of this statement to Claim 4 is not clear as the statement does not use language that is pending in Claim 4.

Nelson's display of prices for options and/or shares of a stock, as illustrated in Figure 5a, is not suggestive of trial order that when paired "includes automatically adjusting the quantity indicated in the trial order to zero," as claimed in the present application. An order to buy or sell an option contract as taught by Nelson results in a trade of a non-zero quantity of the option contract.

Whether considered alone or combined, Gutterman and Nelson fail to teach or suggest the elements of Claim 4. For at least these reasons, Claim 4 should be allowed.

Claims 5-11 and 29-30, which depend either directly or indirectly from Claim 4, are patentable for at least the same reasons as Claim 4 and for the additional subject matter they recite. In particular, applicant maintains that Gutterman and Nelson fail to teach the following features:

- selecting the trial order for pairing with the contra-side order without affecting the pairing priority of other orders in the order file (Claim 5);
- wherein reporting the pairing of the trial order includes sending a pairing report for the zero quantity of the item to a source of the trial order (Claim 6);
- wherein the pairing report includes the price at which the trial order was paired with the contra-side order (Claim 7);
- further comprising entering the trial order into an order file that contains orders to be paired with contra-side orders (Claim 29);
- wherein the order file is maintained by a market process that provides a market that enables market participants to trade items (Claim 30);
- automatically responding to a market inquiry based on orders in the order file other than the trial order (Claim 8);
- automatically removing the trial order from the order file after reporting the pairing of the trial order (Claim 9);
- wherein the automatically receiving, pairing, and reporting are performed by a market process that provides a market at which market participants trade items (Claim 10); and
- wherein the trial order is received from a trading process (Claim 11).

For at least these reasons, Claims 5-11 and 29-30 should be allowed.



#### Claims 12-22, 31, and 32 Are Patentable Over Gutterman and Nelson

Claims 12-22, 31, and 32 are directed to computer systems that facilitate trading. Claim 12 recites "a first computing component" and "a second computing component." The first computing component is "configured to generate a trial order that identifies an item to trade and indicates a non-zero quantity and a price for the item," and further includes "a communications interface configured to send the trial order to a market which enables market participants to trade items, and wherein the quantity indicated in the trial order is automatically set to zero when the trial order is paired with a contra-side order." The second computing component is "configured to receive a pairing report from the market via a communications interface, wherein the trial order has been paired with a contra-side order for a zero quantity of the item, and wherein the trial order provides discovery of current market depth for the item at the indicated quantity and price while resulting in a pairing for a zero quantity of the item."

Claim 15, for its part, recites "one or more computing components configured to receive a trial order and pair the trial order with a contra-side order." The trial order "identifies an item to trade and indicates a non-zero quantity and a price for the item." Upon pairing, the one or more computing components "are configured to automatically set the quantity indicated in the trial order to zero and produce a pairing of the trial order with the contra-side order for a zero quantity of the item." The one or more computing components "are further configured to report the pairing of the trial order for the zero quantity of the item."

For at least the same reasons discussed above relative to Claims 1-3 and 4-11, Gutterman and Nelson neither teach nor suggest the computer systems claimed in Claims 12-22, 31, and 32. Accordingly, for at least these reasons, Claims 12-22, 31, and 32 should be allowed.

#### Claims 23-28 and 33-34 Are Patentable Over Gutterman and Nelson

Claim 23 is directed to "a tangible computer-accessible medium with structurally modified material storing computer-executable instructions, wherein the instructions facilitate trading at a market." When accessed and executed, the instructions cause a computer to "receive

a trial order that identifies an item to trade and indicates a non-zero quantity and a price for the item." The instructions further cause the computer to "pair the trial order with a contra-side order, wherein pairing the trial order includes automatically adjusting the quantity indicated in the trial order to zero and producing a pairing of the trial order with the contra-side order for a zero quantity of the item." The instructions also cause the computer to "report the pairing of the trial order for the zero quantity of the item."

For at least reasons similar to those discussed above relative to Claims 4-9 and 29-30, applicant respectfully submits that Claim 23 and its dependent Claims 24-28, 33, and 34 are not taught or suggested by Gutterman and Nelson, and therefore are allowable over the cited art.

#### New Claims 35-39 Are Patentable Over Gutterman and Nelson

New Claim 35 is directed to a computer system that is configured to facilitate trading. The computer system, as claimed, comprises "means for receiving a trial order via a computer communications interface, wherein the trial order identifies an item to trade and indicates a non-zero quantity and a price for the item, means for pairing the trial order with a contra-side order, wherein the means for pairing are configured to automatically adjust the quantity indicated in the trial order to zero and produce a pairing of the trial order with the contra-side order for a zero quantity of the item, and means for reporting, via a computer communications interface, the pairing of the trial order for the zero quantity of the item."

The specification of the present application describes embodiments of a computer system that implement each of the features recited in Claim 35. Applicant has studied Gutterman and Nelson, and for at least the same reasons discussed above in regard to Claim 4, applicant submits that Gutterman and Nelson do not teach or suggest the means recited in Claim 35. Therefore, Claim 35 is in patentable condition.

New Claims 36-39 depend from Claim 35, and thus are patentable for at least the same reasons as Claim 35. Applicant further submits that Claims 36-39 are patentable for the additional subject matter they recite, including:

- means for entering the trial order into an order file that contains orders to be paired with contra-side orders (Claim 36);
- means for selecting the trial order for pairing with the contra-side order without affecting the pairing priority of other orders in the order file (Claim 37); and
- wherein the means for reporting the pairing of the trial order includes means for sending a pairing report for the zero quantity of the item to a source of the trial order, wherein the pairing report includes the price at which the trial order was paired with the contra-side order (Claim 38).

Claims 35-39 are patentable over the cited art and should be allowed.

### CONCLUSION

Applicant has carefully read and re-read the disclosures of Gutterman and Nelson. The cited references do not support a *prima facie* rejection of the claims under Section 103. Moreover, Claims 1, 4, 12, 15, and 23, as well as new Claim 35, present statutory subject matter under Section 101. Reconsideration of the application and allowance of Claims 1-38 is respectfully requested. Should any issues remain, the Examiner is invited to contact the undersigned counsel by telephone.

Respectfully submitted,

CHRISTENSEN O'CONNOR  
JOHNSON KINDNESS<sup>PLLC</sup>



Kevan L. Morgan  
Registration No. 42,015  
Direct Dial No. 206.695.1712

KLM:jmb